

**SAS Superstructure**

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 21-Nov-14

Time 11:05 PM

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 664 Const Calendar Day: 98 Date: 10-Sep-2012 Monday

Inspector Name: Bruce, Matt Title: Transportation Engineer

Inspection Type: Continuous

Shift Hours: 06:00 am 05:30 pm Break: 00:30 Over Time: 03:00

Federal ID:

Location:

Reviewer: Schmitt, Alex

Approved Date:

Status: Submit

**04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge****Weather****Temperature** 7 AM 50 - 60 12 PM 60 - 70 4PM 60 - 70**Precipitation** 0.00"**Condition** Overcast in the AM to mostly sunny in the PMWorking Day ☐ If no, explain:**Diary:**

Dispute

Work description.

- Surveyed the tower before the start of shift where the current deflection was 452mm to the west. The theoretical deflection of the tower tie back system at this point of load transfer is supposed to be 482mm to the West. The survey was done at the end of Step 1g and before Step 1h which was done today.

The survey was done under uniform ambient conditions where the time of survey (taking shots on the tower) was conducted from 6:40am to 6:50am. The official time of sunrise per weather.com was 6:48am. The ambient temperature during the survey was 54F under mostly cloudy skies. The wind speed was measured from the Southwest direction at 3mph with a barometric pressure of 29.91"Hg. See Bob Brignano's diary for more details on any operations that may have taken place at the tower tie-back foundation in the last week or two.

- Processed the surveying data for today's measurements taken for the tower tie-back release. Sent an email to Caltrans structures construction personnel summarizing today's survey.

- Measured the bolt elongations with the Caltrans CT-1 Extensometer for the following cable bands:

South Mainspan: 88S, 90S, 92S, 94S, 100S

North Mainspan: 82N, 90N, 92N, 94N

South Sidespan: 10S, 12S, 14S, 16S, 18S

The measurements were taken by myself, Alex Schmitt, John Lyons, and Doug Wright. John took all of the readings on the digital dial and recorded the number. Doug, Alex, and myself positioned/handled the Extensometer on the cable band bolts. Doug would ensure that the fixed end pin was in the bolt dimple on one side and myself and Alex would do the same with the spring-pinned end. Also I would be on top of the cable band for the top row of cable band bolts.

It should be noted that two sets of measurements were taken on the South Mainspan and South Sidespan cable bands today. One set of measurements would be taken just prior to these cable band bolts being stressed. Then one set of measurements would be taken immediately after the ABF crews retensioned the bolts. The measurements taken on the North Mainspan cable bands were done for historical reasons to see the behavior of these particular bolts.

Today Phase 1/ Step 1h of load transfer was completed during the stressing operations of the cable band bolts. In order to proceed with the next step of Phase 1 load transfer, certain welding repairs and



Daily Diary Report by Bid Item

Job Name: 04-0120F4

Inspector Name Bruce, Matt

Diary #: 664

Date: 10-Sep-2012 Monday

operations need to be completed at the east end of the bridge in order to proceed with jacking suspender ropes closer to the OBG brackets.

While measuring cable band bolts on the South Sidespan I noticed that a suspender rope on cable bands 14S and 16S were bound against the catwalk tubing, see photo below. There was a severe kink in the ropes going through the catwalk and the ropes were also seen bound against the cable band suspender groove as well. Doug informed Roman who informed Scott Yeager as ABF ironworkers resolved the issue on 14S but not 16S.

Attachment



A loaded section of the North Mainspan cable where there are pronounced "kinks" seen where a suspender has been loaded.



The south Mainspan cable geometry change seen from the North Mainspan cable.



Conditions during the tower release or deflection survey where load transfer operation is currently in Phase 1 Step 1g before the start of shift.



Overview of the South Mainspan cable "kinks" due to suspender rope jacking in Phase 1 Step 1 of load transfer.

Daily Diary Report by Bid Item

Job Name: 04-0120F4

Inspector Name Bruce, Matt

Diary #: 664

Date: 10-Sep-2012 Monday



Panel point 14S downhill suspender rope seen on the south side of cable band where it is bound against a catwalk tubed section.



Change in the Mainspan cable geometry due to the suspender rope loading at the OBG.